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10/743,803	12/24/2003	Young Sin Lee	SI-0053	9801
34610 7550 03/31/2008 KED & ASSOCIATES, LLP P.O. Box 221200			EXAMINER	
			LIU, BEN H	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/743.803 LEE, YOUNG SIN Office Action Summary Examiner Art Unit BEN H. LIU 2616 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on December 21, 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-18 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-18 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (FTO/S5/08)
 Paper No(s)/Mail Date \_\_\_\_\_\_\_.

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5 Notice of Informal Patent Application

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### DETAILED ACTION

#### Response to Amendment

- This is in response to an amendment/response filed on December 21, 2007.
- Claims 1, 3-5, 7-10, and 17 have been amended.
- No claims have been cancelled.
- Claim 18 has been added.
- Claims 1-18 are currently pending.

## Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

 Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Jones et al. (U.S. Patent 6,868,059).

For claim 18, Jones et al. disclose a method for operating a gatekeeper cluster, comprising: dividing one zone into at least two sub-zones in a communication system; providing first redundancy of at least one alternative gatekeeper for each sub-zone, the first redundancy provided by maintaining at least one master gatekeeper and at least one standby gatekeeper in each sub-zone (see column 2 lines 16-22, which recite a cluster including a number of alternate

gatekeepers); and providing second redundancy of at least one route for a pass between the subzones, the second redundancy provided by performing heartbeat polling between alternative
gatekeepers in order to check whether the master gatekeeper is operating normally (see column 2
lines 16-29, which recite alternate gatekeepers exchanging information with each other to
provide redundant service), wherein said heartbeat polling is performed based on transmission of
a non-standard H.323 message (see column 4 lines 7-41, which recite exchanging registration
and resource availability information between gatekeepers using the gatekeeper update
protocol).

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
  obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - Determining the scope and contents of the prior art.
  - Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - Considering objective evidence present in the application indicating obviousness or nonobviousness.
- Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al.
   (U.S. Patent 6,868,059).

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For claim 1, Jones et al. disclose a gatekeeper cluster comprising one zone divided into at least two sub-zones in a communication system and at least one alternative gatekeeper providing redundancy for each sub-zone (see column 2 lines 16-22, which recite a cluster including a number of alternate gatekeepers); and a pass between the sub-zones to provide redundancy for setting up a call, wherein the pass includes one or more routes between the subzones which provide call set-up redundancy (see column 2 lines 16-29, which recite alternate gatekeepers exchanging information with each other to provide redundant service) including: transmitting a message from a gatekeeper in a first sub-zone to a gatekeeper in a second subzone, the message including at least one of information indicating that the gatekeeper in the first sub-zone is available to set up the call or address information corresponding to one or more alternative gatekeepers in the first sub-zone, or transmitting a message from the gatekeeper in the first sub-zone to the gatekeeper in the second sub-zone, the gatekeeper in the second sub-zone updating information to indicate that the gatekeeper in the first sub-zone is unavailable to set up the call (see column 4 lines 12-14, which recites gatekeepers exchanging information regarding their availability).

Jones et al. teaches all the limitations of the claimed invention with the exception wherein the alternate gatekeepers message each other using RAS messages such as LRQ, LCF and LRQ. However, Jones et al. discloses using RAS messages to communicate between gatekeepers and endpoints (see column 3 lines 30-60). Jones et al. further discloses messaging availability, registration, and endpoint resource availability between gatekeepers (see column 4 lines 13-31). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the RAS signals to communicate availability, registration, and endpoint resource

availability information as taught by Jones et al. The motivation for using RAS signaling to communicate availability, registration, and endpoint resource availability information is to improve the reliability of the system by using RAS signals to communicate between endpoints and alternate gatekeepers.

For claim 2, Jones et al. disclose a gatekeeper cluster comprising at least one alternative gatekeeper providing redundancy for each sub-zone wherein the alternative gatekeeper provides redundancy by one master gatekeeper and at least one standby gatekeeper, the master gatekeeper by itself operating as the gatekeeper of the sub-zone thereof (see column 4 lines 43-45, which recite a priority table that ranks alternate gatekeepers according to their availability).

For claim 3, Jones et al. disclose a gatekeeper cluster comprising at least one alternative gatekeeper providing redundancy for each sub-zone wherein the at least one alternative gatekeeper of each sub-zone has access to a zone routing table (see column 4 lines 20-31, which recite exchanging registration and resource availability information between gatekeepers to allow proper routing).

For claim 4, Jones et al. disclose a gatekeeper cluster comprising at least one alternative gatekeeper providing redundancy for each sub-zone wherein the zone routing table determines to which zone a call is routed with reference to a telephone number of a callee, when there is no desired number managed by an alternative gatekeeper in one of the sub-zones (see column 1 lines 49-58).

For claim 5, Jones et al. disclose a gatekeeper cluster comprising at least one alternative gatekeeper providing redundancy for each sub-zone wherein the zone routing table contains a gatekeeper identifier used for authentication during signaling between the sub-zones, a zone

prefix representing a number schedule of each sub-zone, a gatekeeper type indicating any one of the alternative gatekeeper and the gatekeeper of a neighbor zone, and a priority representing a priority of the alternative gatekeepers, the gatekeeper in the second sub-zone updating the routing table based on information contained in the message (see column 4 lines 36-45, which recite a priority table for identifying alternate gatekeepers and their priorities).

Jones et al. teaches all the limitations of the claimed invention with the exception wherein the alternate gatekeepers message each other using RAS messages such as LCF and LRQ. However, Jones et al. discloses using RAS messages to communicate between gatekeepers and endpoints (see column 3 lines 30-60). Jones et al. further discloses messaging availability, registration, and endpoint resource availability between gatekeepers (see column 4 lines 13-31). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the RAS signals to communicate availability, registration, and endpoint resource availability information as taught by Jones et al. The motivation for using RAS signaling to communicate availability, registration, and endpoint resource availability information is to improve the reliability of the system by using RAS signals to communicate between endpoints and alternate gatekeepers.

For claim 6, Jones et al. disclose a gatekeeper cluster comprising at least one alternative gatekeeper providing redundancy for each sub-zone wherein the gatekeeper identifier is equally given to all the alternative gatekeepers within any one of the sub-zones (see column 4 lines 43-45, wherein an equal priority between the alternate gatekeepers would equally identify the gatekeepers).

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For claim 7, Jones et al. disclose a method for operating a gatekeeper cluster, comprising the steps of dividing one zone into at least two sub-zones in a communication system and providing first redundancy of at least one alternative gatekeeper for each sub-zone (see column 2 lines 16-22, which recite a cluster including a number of alternate gatekeepers); and providing second redundancy of at least one route for a pass between the sub-zones, wherein the pass includes one or more routes between the sub-zones which provide call set-up redundancy based on location request signaling, said second redundancy being performed based on information contained in at least one predetermined field of a message transmitted between alternative gatekeepers in the sub-zones (see column 2 lines 16-29, which recite alternate gatekeepers exchanging information with each other to provide redundant service).

Jones et al. teaches all the limitations of the claimed invention with the exception wherein the alternate gatekeepers message each other using RAS messages such as LRQ, LCF and LRQ. However, Jones et al. discloses using RAS messages to communicate between gatekeepers and endpoints (see column 3 lines 30-60). Jones et al. further discloses messaging availability, registration, and endpoint resource availability between gatekeepers (see column 4 lines 13-31). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the RAS signals to communicate availability, registration, and endpoint resource availability information as taught by Jones et al. The motivation for using RAS signaling to communicate availability, registration, and endpoint resource availability information is to improve the reliability of the system by using RAS signals to communicate between endpoints and alternate gatekeepers.

For claim 8, Jones et al. disclose a method for operating a gatekeeper cluster wherein the alternative gatekeepers provide said first redundancy by maintaining at least one master gatekeeper and at least one standby gatekeeper in each sub-zone, the master gatekeeper by itself operating as the gatekeeper of the sub-zone thereof (see column 4 lines 43-45, which recite a priority table that ranks alternate gatekeepers according to their availability).

For claim 9, Jones et al. disclose a method for operating a gatekeeper cluster wherein the second redundancy of further comprises, when the master gatekeeper receives an arbitrary request (xRQ) message from a terminal, searching an alternative type gatekeeper in a routing table, encoding the searched alternative type gatekeeper, transmitting an arbitrary confirm (xCF) message to the terminal, and setting up the call (see column 1 lines 49-58).

For claim 10, Jones et al. disclose a method for operating a gatekeeper cluster wherein the second redundancy of further comprises, when the standby gatekeeper receives an arbitrary request (xRQ) message from a terminal, performing heartbeat signaling for master polling in order to check whether the master gatekeeper operates normally (see column 4 lines 13-31).

Jones et al. teaches all the limitations of the claimed invention with the exception wherein the alternate gatekeepers message each other using RAS messages such as xRQ. However, Jones et al. discloses using RAS messages to communicate between gatekeepers and endpoints (see column 3 lines 30-60). Jones et al. further discloses messaging availability, registration, and endpoint resource availability between gatekeepers (see column 4 lines 13-31). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the RAS signals to communicate availability, registration, and endpoint resource availability information as taught by Jones et al. The motivation for using RAS signaling to communicate

availability, registration, and endpoint resource availability information is to improve the reliability of the system by using RAS signals to communicate between endpoints and alternate gatekeepers.

For claim 11, Jones et al. disclose a method for operating a gatekeeper cluster wherein the heartbeat signaling comprises at the standby gatekeeper, generating a message, transmitting the generated information request message to the master gatekeeper, and checking whether or not there is a response from the master gatekeeper (see column 4 lines 12-14); if there is any response, at the standby gatekeeper, searching an alternative type gatekeeper in a routing table to encode the searched alternative type gatekeeper and transmitting an message to the requesting terminal (see column 1 lines 49-58); generating an arbitrary request message at the terminal receiving the arbitrary reject message, transmitting the generated arbitrary request message at the master gatekeeper, and requesting to set up a call; and generating an arbitrary confirm message at the master gatekeeper receiving the arbitrary request message, transmitting the generated arbitrary confirm message to the terminal, and setting up the call (see column 1 lines 49-58 and column 4 lines 13-31, which recite communicating between a gatekeeper and terminal to establish a call by using availability, registration, and endpoint resource availability information exchanged between alternate gatekeepers).

Jones et al. teaches all the limitations of the claimed invention with the exception wherein the alternate gatekeepers message each other using RAS messages such as IRQ, xRJ, xRQ, xRJ, and xCF. However, Jones et al. discloses using RAS messages to communicate between gatekeepers and endpoints (see column 3 lines 30-60). Jones et al. further discloses messaging availability, registration, and endpoint resource availability between gatekeepers (see column 4

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lines 13-31). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the RAS signals to communicate availability, registration, and endpoint resource availability information as taught by Jones et al. The motivation for using RAS signaling to communicate availability, registration, and endpoint resource availability information is to improve the reliability of the system by using RAS signals to communicate between endpoints and alternate gatekeepers.

For claim 12, Jones et al. disclose a method for operating a gatekeeper cluster wherein the routing table contains a gatekeeper identifier used for authentication during signaling between the sub-zones, a zone prefix representing a number schedule of each sub-zone, a gatekeeper type indicating any one of the alternative gatekeeper and the gatekeeper of a neighbor zone, and a priority representing a priority of the alternative gatekeepers (see column 4 lines 36-45, which recite a priority table for identifying alternate gatekeepers and their priorities).

For claim 13, Jones et al. disclose a method for operating a gatekeeper cluster wherein the heartbeat signaling further comprises, if there is no response, the standby gatekeeper being changed into the master gatekeeper, searching the alternative type gatekeeper in the routing table, encoding the searched alternative type gatekeeper, transmitting a message to the terminal, and setting up the call (see column 1 lines 49-58 and column 2 lines 22-29, which recite communicating between a gatekeeper and terminal to establish a call wherein a failed gatekeeper can be replaced while preserving the functionality of the cluster).

Jones et al. teaches all the limitations of the claimed invention with the exception wherein the alternate gatekeepers message each other using RAS messages such as IRQ, xRJ, xRQ, xRJ, and xCF. However, Jones et al. discloses using RAS messages to communicate between

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gatekeepers and endpoints (see column 3 lines 30-60). Jones et al. further discloses messaging availability, registration, and endpoint resource availability between gatekeepers (see column 4 lines 13-31). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the RAS signals to communicate availability, registration, and endpoint resource availability information as taught by Jones et al. The motivation for using RAS signaling to communicate availability, registration, and endpoint resource availability information is to improve the reliability of the system by using RAS signals to communicate between endpoints and alternate gatekeepers.

For claim 14, Jones et al. disclose a method for operating a gatekeeper cluster wherein the heartbeat signaling further comprises at the gatekeeper changed into the master gatekeeper, transmitting a message to grant registration of the terminal, generating a Nonstandard message and transmitting the generated Nonstandard message to other gatekeepers; when the gatekeeper having already operated as the master gatekeeper among the other gatekeepers receives the Nonstandard message, comparing a time of the gatekeeper itself with a time of the Nonstandard message; and if the time of the gatekeeper itself is faster than the time of the Nonstandard message, at the gatekeeper having already operated as the master gatekeeper, generating the Nonstandard message, transmitting the generated Nonstandard message to the gatekeeper changed into the master gatekeeper, and changing into the standby gatekeeper again (see column 5 lines 45-54, which recite comparing different priority tables based upon their generated time to determine the priority of the alternate gatekeepers).

Jones et al. teaches all the limitations of the claimed invention with the exception wherein the alternate gatekeepers message each other using RAS messages such as xCF. However, Jones

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et al. discloses using RAS messages to communicate between gatekeepers and endpoints (see column 3 lines 30-60). Jones et al. further discloses messaging availability, registration, and endpoint resource availability between gatekeepers (see column 4 lines 13-31). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the RAS signals to communicate availability, registration, and endpoint resource availability information as taught by Jones et al. The motivation for using RAS signaling to communicate availability, registration, and endpoint resource availability information is to improve the reliability of the system by using RAS signals to communicate between endpoints and alternate gatekeepers.

For claim 15, Jones et al. disclose a method for operating a gatekeeper cluster wherein transmitting the Nonstandard message comprises recording a time when the alternative gatekeeper is changed into the master gatekeeper, and informing the other gatekeepers of the recorded time using the Nonstandard message (see column 5 lines 45-54).

For claim 16, Jones et al. disclose a method for operating a gatekeeper cluster wherein the heartbeat signaling further comprises generating the arbitrary request message at the terminal receiving the arbitrary confirm message, transmitting the generated arbitrary request message to the gatekeeper changed into the master gatekeeper, and requesting to set up the call; and when the gatekeeper changed into the master gatekeeper is recognized to be the standby gatekeeper to be changed into the standby gatekeeper again and receives the arbitrary request message, performing again the heartbeat signaling for master polling (see column 1 lines 49-58 and column 4 lines 36-45, which recite communicating between a gatekeeper and terminal to

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establish a call wherein a master gatekeeper would have a higher priority than a standby gatekeeper in the updated priority tables).

Jones et al. teaches all the limitations of the claimed invention with the exception wherein the alternate gatekeepers message each other using RAS messages such as xRQ and xCF. However, Jones et al. discloses using RAS messages to communicate between gatekeepers and endpoints (see column 3 lines 30-60). Jones et al. further discloses messaging availability, registration, and endpoint resource availability between gatekeepers (see column 4 lines 13-31). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the RAS signals to communicate availability, registration, and endpoint resource availability information as taught by Jones et al. The motivation for using RAS signaling to communicate availability, registration, and endpoint resource availability information is to improve the reliability of the system by using RAS signals to communicate between endpoints and alternate gatekeepers.

 Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (U.S. Patent 6,868,059) as applied to claim 7 above, and further in view of Beyda (U.S. Patent Application Publication 2003/0035414).

For claim 17, Jones et al. disclose a method for operating a gatekeeper cluster wherein the redundancy of the route comprises: when the first alternative gatekeeper of the first sub-zone receives the arbitrary request message from the caller terminal of the first sub-zone, checking whether or not a callee number exists in the first sub-zone; if the callee number does not exist in the first sub-zone, at the first gatekeeper, transmitting the arbitrary request message to the second

gatekeeper of the second sub-zone with reference to the zone routing table (see column 4 lines 20-27, which recite alternate gatekeepers exchanging messages with endpoint registration information)); when the second gatekeeper is the master gatekeeper, generating the arbitrary confirm message, transmitting the generated arbitrary confirm message to the first gatekeeper, and authenticating the caller terminal; at the authenticated caller terminal, generating a set-up message and transmitting the generated set-up message to the callee terminal of the second subzone through the first gatekeeper; at the callee terminal, generating the arbitrary request message and transmitting the generated arbitrary request message to the first gatekeeper through the second gatekeeper; at the first gatekeeper, generating the arbitrary confirm message containing signaling information of the first gatekeeper and transmitting the generated arbitrary confirm message to the callee terminal through the second gatekeeper; at the callee terminal, generating an alerting message and transmitting the generated alerting message to the caller terminal through the second and first gatekeepers; at the callee terminal, generating a connect message and transmitting the generated connect message to the caller terminal through the second and first gatekeepers (see column 1 lines 49-58 and column 4 lines 13-31, which recite communicating between a gatekeeper and terminal to establish a call by using availability. registration, and endpoint resource availability information exchanged between alternate gatekeepers).

Jones et al. does not teach alternate gatekeepers that use RAS messages such as xRQ and xCF to communicate between each other. However, Jones et al. discloses using RAS messages to communicate between gatekeepers and endpoints (see column 3 lines 30-60). Jones et al. further discloses messaging availability, registration, and endpoint resource availability between

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gatekeepers (see column 4 lines 13-31). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the RAS signals to communicate availability, registration, and endpoint resource availability information as taught by Jones et al. The motivation for using RAS signaling to communicate availability, registration, and endpoint resource availability information is to improve the reliability of the system by using RAS signals to communicate between endpoints and alternate gatekeepers.

Jones et al. teaches all the limitations of the claimed invention with the exception wherein the method for operating a gatekeeper cluster includes transceiving H.245 signals between the callee terminal and the second gatekeeper, between the second gatekeeper and the first gatekeeper and between the first gatekeeper and the caller terminal to allow carrying on a conversation with each other. Beyda from the same or similar fields of endeavor discloses a backup gatekeeper, which establishes a call between two terminals across gatekeepers using H.245 control signaling (see figure 1 and paragraph 27). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the backup gatekeeper that establishes a call between two terminals across gatekeepers using H.245 control signaling as taught by Beyda with the gatekeeper cluster that provides redundancy of the route as taught by Jones et al. The backup gatekeeper as taught by Beyda can be implemented by ensuring that the gatekeepers as taught by Jones et al. are compliant with the H.245 control signaling used within the H.323 Recommendation (see paragraph 19). The motivation for using the backup gatekeepers at taught by Beyda is to enable the gatekeeper cluster taught by Jones et al. to provide service for terminals that use the widely deployed H.323 specification.

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## Response to Arguments

 Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See form PTO-892).
- 14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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BL

/FIRMIN BACKER/

Supervisory Patent Examiner, Art Unit 2616